



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/600,764

06/23/2003

Eddy Lambert

016782-0280

5710

22428 7590 09/04/2007  
FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

COLE, ELIZABETH M

ART UNIT

PAPER NUMBER

1771

MAIL DATE

DELIVERY MODE

09/04/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/600,764	LAMBERT ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Elizabeth M. Cole	1771	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-31, 33-35, 38-46, 51-55 and 57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-31, 33-35, 38-46, 51-55, 57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 1771

1. Claims 13-31, 33-35, 38-46, 51-55, 57 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not provide support for the limitation that the stainless steel fibers are made from a high temperature alloy. The specification as originally filed teaches "heat resistant stainless steel fibers" and teaches that "Fecralloy" is a suitable variety of heat resistant stainless steel fibers, but the specification does not recite that the stainless steel fibers are made from a high temperature alloy. Applicant has provided information in the form of material data sheets describing the composition of Fecralloy. The specification needs to be amended to include these limitations. Further, such amendments must be supported by satisfactory showings establishing that the specific nature or process of manufacture of the product as set forth in the amendment was known at the time of filing of the application. Therefore, Applicant needs to provide a showing that the trademark Fecralloy at the time the application was filed has the meaning and composition shown in the attached information. The showing in the appendix does not appear to have a date showing that the composition at the time the application was filed the same as the composition at the time the material data sheet was obtained.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13-31, 33-34, 38-46, 51-55, 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dewaegheneire et al, WO 97/04152, in view of Hunter et al, U.S. Patent NO. 4,214,867, EP 0268146 and Krupnik et al, U.S. Patent No. 6,298,538. Dewaegheneire discloses a burner fabric comprising machined metal filaments which may comprise a high temperature alloy, such as alloys of iron, chromium and yttrium. See page 3, lines 20-32. The fibers can be formed into fabrics which are used as burner membranes. See page 4, lines 20-36. . The fabrics are useful as burner membranes without having to be sintered and have an advantage over sintered membranes because the unsintered membranes are more pliable and because they heat up much more rapidly. See page 6, line 31 – page 7, line 16. The fibers are made by shaving, (see page 1, lines 8-17; page 5, lines 7-10. Dewaegheneire differs from the claimed invention because it does not teach employing nonwoven fabrics but instead teaches knitted fabrics, does not teach needling. Hunter et al teaches that both knitted and nonwoven fabrics can be used to make burner membranes. See col. 2, lines 51-52. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed a nonwoven rather than knitted fabric in the invention of Dewaegheneire, motivated by the teaching of Hunter that both types of fabrics were recognized in the art as being suitable for use as burner membranes. With regard to the needling, Krupnik teaches that needling nonwoven webs formed from

Art Unit: 1771

metal fibers such as stainless steel fibers produces a stronger product. See abstract. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have needled the web of Dewaegheneire, in order to produce a stronger fabric. With regard to the particular porosity claimed, since needling is known in the art as a method by which the density and porosity of a nonwoven can be adjusted and controlled, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the degree of needling through the process of routine experimentation in order to arrive at a fabric having the desired porosity.

4. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over . Dewaegheneire et al, WO 97/04152, in view of Hunter et al, U.S. Patent NO. 4,214,867 and Krupnik et al, U.S. Patent No. 6,298,538 as applied to claims above, and further in view of DeBruyne et al, U.S. Patent No. 5,088,919. Dewaegheneire does not disclose coating the fibers with a coating that activates the oxidation of the burner fuel mixture. De Bruyne et al teaches that the fibers can be coated with a material which activates the oxidation of the burner fuel mixture. See col. 4, lines 35-49. It would have been obvious to one of ordinary skill in the art to have coated the fibers of Dewaegheneire with the coating of De Bruyne et al, motivated by the expectation that this would enhance the heat resistance of the fibers.

5. Applicant's arguments filed 6/19/07 have been fully considered but they are not persuasive. Applicant argues that the prior art cited in the instant response shows that the trademark term Fecralloy was known to be an alloy comprising iron, chromium and

Art Unit: 1771

yttrium. However, a internet search produced results that there are a number of materials which use the trademark Fecralloy, some of which comprise yttrium and some of which do not. Therefore, the rejection is maintained because it is not clear what the trademarked term is intended to designate, either a composition which comprises yttrium or one which does not, or both.

6. With regard to the new art rejection above, newly cited reference WO 97/04152, Dewaegheneire, teaches fabrics formed from Fecralloy fibers and other high temperature alloys which are used to make burner membranes and which are not sintered. Dewaegheneire teaches that non sintering the membrane produces a more pliable membrane which heats up more quickly. Therefore, in view of this teaching, the previously indicated allowability of the claims for reciting that the burner membrane was not sintered and comprised high temperature alloy fibers is withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

/Elizabeth M. Cole/  
Primary Examiner, Art Unit 1771

Application/Control Number: 10/600,764  
Art Unit: 1771

Page 6